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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,092	12/28/2001	Richard E. Smalley	11321-P012USD4	9987
47744	7590	02/15/2005	EXAMINER	
ROSS SPENCER GARSSON WINSTEAD SECHREST & MINICK P.C. P. O. BOX 50784 DALLAS, TX 75201			HENDRICKSON, STUART L	
			ART UNIT	PAPER NUMBER
			1754	

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

12/033092

Applicant(s)

Smalley

Examiner

K. Anderson

Group Art/Unit

1754

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on 12/1/04

☒ This action is **FINAL**.

- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 34, 35, 163-170 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 35, 167 is/are allowed.
- ☒ Claim(s) 37, 163-166, 168-170 is/are rejected.
- ☐ Claim(s) 34 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____ ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other _____

Office Action Summary

Art Unit: 1754

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 34, 163-166, 168-170 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al.

Li teaches an array of catalysts and making nanotubes thereon. Li does not exemplify SWNTs but indicates on pg. 1703 (left) that they could be made by optimizing conditions for their growth. Thusly, the claimed invention represents the optimization of this teaching to arrive at this result. Using catalysts which were known at the time to grow SWNTs (ie, cobalt) is an obvious expedient to form the SWNTs. The number of catalyst islands used does not impart patentability; In re Rose 105 USPQ 137.

Applicant's arguments filed 12/1/04 have been fully considered but they are not persuasive.

The argument that not all the wells are filled is not persuasive, as It appears (in so far as this would be measurable) that the present process is subject to the same random events which could leave a single pore unfilled. The difference between a 'pore' and a 'microwell' is not seen. While the reference discusses possible growth directions, these can be optimized and controlled as desired. Likewise, one could choose- based upon the reference and what was known in the art at the time- to grow single-wall nanotubes without undue experimentation. The term 'array' is not so narrow as applicant appears to argue, and encompasses the distribution of pores in a material. Claims 35 and 167 are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 1754

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.

A handwritten signature in black ink, appearing to read 'Stuart Hendrickson', is positioned above the printed name.

Stuart Hendrickson
examiner Art Unit 1754